

Graduate Schools
Infection Immunity and Cancer, UniGe & UniL: CUS
Biology & Medicine, CMU

Seminars in Microbiology

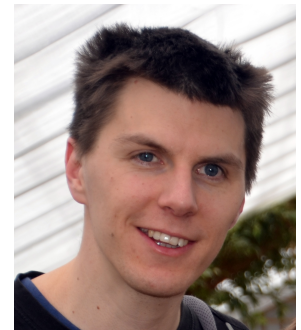
Monday, October 20, 2014

Salle de séminaire 7172, CMU

11:30 – 12:30

Andreas Diepold

Department of Biochemistry, University of Oxford



Translocation in Motion - In vivo Dynamics and Regulation of the Type III Secretion System

Andreas Diepold got his training in the laboratory of Guy Cornelis at the Biozentrum in Basel working on the *Yersinia* type III secretion system (TTSS). At present he is working in the group of Judith Armitage at the department of Biochemistry in Oxford. TTSS are highly complex structures that allow the injection of effector proteins into host cells, modifying thereby the behavior of these cells either to induce phagocytosis, or to change the cytoplasmic environment to allow intracellular survival. At present Andreas is using fusion proteins combined with high resolution fluorescence microscopy to follow the dynamic rearrangements that occur during assembly, disassembly and function of these highly complex needles.

Recent publications:

Diepold A, Wagner S. Assembly of the bacterial type III secretion machinery. *FEMS Microbiol Rev.* 2014;38:802-22

Diepold A, Wiesand U, Amstutz M, Cornelis GR. Assembly of the *Yersinia* injectisome: the missing pieces. *Mol Microbiol.* 2012; 85:878-92.

Diepold A, Wiesand U, Cornelis GR. The assembly of the export apparatus (YscR,S,T,U,V) of the *Yersinia* type III secretion apparatus occurs independently of other structural components and involves the formation of an YscV oligomer. *Mol Microbiol.* 2011; 82:502-14.

Contact: P. Linder

Sandwiches will be offered after the seminar